

# **EXHIBIT A**



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

Permit No.: VA0063690  
Effective Date: June 1, 2017  
Expiration Date: May 31, 2022

### AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTION DISCHARGE ELIMINATION SYSTEM

AND


### THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

Owner: County of Henrico  
Facility Name: Henrico County Water Reclamation Facility  
County: Henrico County  
Facility Location: 9101 WRVA Road, Henrico, VA 23231

The owner is authorized to discharge to the following receiving stream:

Name: James River  
Basin: James River (Lower)  
Subbasin: N/A  
Section: 1  
Class: II  
Special Standards: None

  
\_\_\_\_\_  
Deputy Regional Director, Piedmont Regional Office

31 May 2017  
\_\_\_\_\_  
Date

**A. Limitations and Monitoring Requirements**

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall number 001.

a. This discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		MONTHLY AVERAGE		WEEKLY AVERAGE		MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
001 Flow (MGD) <sup>(1)</sup>		NL		NA		NA	NL	Continuous	TIRE
002 pH (standard units)		NA		NA		6.0	9.0	1 per Day	Grab
004 Total Suspended Solids (TSS)		8.0 mg/L <sup>(2)</sup>	2300 kg/d <sup>(2)</sup>	12 mg/L	3400 kg/d <sup>(2)</sup>	NA	NA	1 per Day	24 HC
005 Total Residual Chlorine (TRC) <sup>(3)</sup>		28 µg/L		35 µg/L		NA	NA	1 per 2 Hours <sup>(7)</sup>	Grab
007 Dissolved Oxygen		NA		NA		5.6 mg/L	NA	1 per Day	Grab
Ammonia as N	318 June – October	3.84 mg/L	1090 kg/d	5.76 mg/L	1635 kg/d	NA	NA	1 per Day	24 HC
	069 November - May	5.60 mg/L	1589 kg/d	8.40 mg/L	2385 kg/d	NA	NA	1 per Day	24 HC
Carbonaceous Biochemical Oxygen Demand (cBOD <sub>5</sub> )	315 June – October	5 mg/L	1361 kg/d	7 mg/L	2044 kg/d	NA	NA	1 per Week	24 HC
	073 November - May	8 mg/L	2157 kg/d	11 mg/L	3236 kg/d	NA	NA	1 per Week	24 HC
120 <i>E. coli</i>		126 N/100mL (Geometric Mean)		NA		NA	NA	4 per Month <sup>(8)</sup> between 10am - 4pm	Grab
792 Total Nitrogen- Annual Average <sup>(2) (4) (5)</sup>		5.0 mg/L		NA		NA	NA	1 per Year	Calculated
794 Total Phosphorus- Annual Average <sup>(2) (4) (5)</sup>		0.50 mg/L		NA		NA	NA	1 per Year	Calculated
805 Total Nitrogen – Year-to-Date <sup>(4) (5) (6)</sup> (mg/L)		NL		NA		NA	NA	1 per Month	Calculated
806 Total Phosphorus – Year-to-Date <sup>(4) (5)</sup> (mg/L)		NL		NA		NA	NA	1 per Month	Calculated

"NL" means no limitation is established. Monitoring and reporting are required.

"NA" means not applicable.

“24 HC” means 24-Hour Composite.

“TIRE” means Totalizing, Indicating, and Recording.

<sup>1</sup> The design flow of this treatment facility is 75.00 MGD. See Part I.C.1 for additional flow requirements.

<sup>2</sup> This limitation is expressed in two significant digits.

<sup>3</sup> See Part I.B for additional TRC limitations that apply at the outlet of the chlorine contact tank.

<sup>4</sup> See Part I.C.11 and 12 for nutrient reporting requirements.

<sup>5</sup> In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN040081, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.

<sup>6</sup> Total Nitrogen, which is the sum of TKN and Nitrate plus Nitrite, shall be derived from the results of those tests.

<sup>7</sup> “1 per 2 Hours” is defined as 1 sample taken every 2 hours.

<sup>8</sup> “4 per Month” means four samples collected weekly, in each calendar month.

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. At least 85% removal for cBOD<sub>5</sub> and TSS must be obtained for this effluent.

**B. Additional TRC Limitations and Monitoring Requirements**

1. The permittee shall monitor the TRC at the outlet of each operating chlorine contact tank once every two hours by grab sample.
2. No more than **36** of all samples taken at the outlet of the chlorine contact tank system shall be less than **1.0 mg/L** for any one calendar month (DMR parameter 157).
3. No TRC sample collected at the outlet of the chlorine contact tank system shall be less than **0.60 mg/L** (DMR parameter 213) unless the *E.coli* in the final effluent is also less than 126 N/100mL. When the TRC concentration after the contact tank and prior to dechlorination is less than 0.60 mg/L, an *E. coli* sample of the final effluent may be taken within 15 minutes. If the *E. coli* sample is less than 126 N/100mL, then the original TRC samples shall be considered as being in compliance.
4. If dechlorination facilities exist the samples above shall be collected prior to dechlorination.
5. If disinfection is by a method other than chlorination, *E. coli* shall be limited and monitored by the permittee as specified below and this requirement, if applicable, shall substitute for the TRC and *E. coli* requirements delineated elsewhere in Part I of this permit.

EFFLUENT PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	MONTHLY AVERAGE	WEEKLY AVERAGE	FREQUENCY	SAMPLE TYPE
<i>E. coli</i> (Geometric Mean)	126 N/100 mL	NA	1 per Day between 10 am - 4 pm	Grab

**C. Other Special Conditions**1. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ Piedmont Regional Office when the monthly average flow influent to the sewage treatment works reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of the permit.

2. Indirect Discharges

The permittee shall provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. Operations and Maintenance Manual Requirement

The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9 VAC 25-31 and (for sewage treatment plants) Sewage Collection and Treatment Regulations, 9 VAC 25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2

and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water and sludge samples;
- b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
- c. Discussion of Best Management Practices, if applicable;
- d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.B.9 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;
- e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
- f. Plan for the management and/or disposal of waste solids and residues;
- g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
- h. List of facility, local and state emergency contacts; and,
- i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.

#### 4. Licensed Operator Requirement

The permittee shall employ or contract at least one **Class 1** licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

#### 5. Reliability Class

The permitted treatment works shall meet **Reliability Class I**.

#### 6. Compliance Reporting

- a. The quantification levels (QLs) shall be less than or equal to the following concentrations:

<u>Effluent Characteristic</u>	<u>Quantification Level</u>
cBOD <sub>5</sub>	2 mg/L
TSS	1.0 mg/L
TRC	0.10 mg/L (100 µg/L)
Ammonia as N	0.20 mg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

## b. Reporting

**Monthly Average** – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

**Weekly Average** – Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis, then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

**Single Datum** – Any single datum required shall be reported as "<QL" if it is less than the QL used for analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

- c. **Significant Digits** – The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

7. Materials Handling/Storage

Any and all product, materials or wastes shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, or other wastes to State waters, except as expressly authorized.

8. CTC, CTO Requirement

The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9 VAC 25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Fund (WQIF) projects) or from the Piedmont Regional Office (for non-WQIF projects). The request for a CTC or CTO shall be submitted by the design engineer and owner to the DEQ Piedmont Regional Office Water Permit Manager prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

Upon issuance of a CTC for nutrient removal technology, DEQ staff may initiate modification, or alternately, revocation and reissuance, of this permit, to include annual concentration limits based on the nutrient removal technology listed in the CTC. Upon issuance of a CTO, any nutrient removal facilities installed shall be operated to achieve design effluent nutrient concentrations.



## 9. Reopeners

This permit may be modified or, alternatively, revoked and reissued:

- a. If any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;
- b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade, or
- c. To incorporate alternative nutrient limitations and/or monitoring requirements, should:
  - (1) The State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
  - (2) A future water quality regulation or statute require new or alternative nutrient control.

## 10. Closure Plan

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Piedmont Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

## 11. Nutrient Reporting Calculations

For each calendar month, the DMR shall show the calendar year-to-date average concentration (mg/L) calculated in accordance with the following formulae:

$$AC_{avg}\text{-YTD} = ( \sum_{(\text{Jan-current month})} MC_{avg} ) \div ( \# \text{ of months} )$$

where:

$AC_{avg}\text{-YTD}$  = calendar year-to-date average concentration (mg/L) (parameter codes 805 and 806)

$MC_{avg}$  = monthly average concentration (mg/L) as reported on the Nutrient General Permit DMR

The total nitrogen and total phosphorus average concentration (mg/L) for each calendar year (AC) shall be shown on the December DMR due January 10<sup>th</sup> of the following year. These values shall be calculated in accordance with the following formulae:

$$AC_{avg} = ( \sum_{(\text{Jan-Dec})} MC_{avg} ) \div 12$$

where:

$AC_{avg}$  = calendar year average concentration (mg/L) (parameter codes 792 and 794)

$MC_{avg}$  = monthly average concentration (mg/L) as reported on the Nutrient General Permit DMR

For Total Phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point



is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

#### 12. Suspension of Annual Average Concentration Limitations for E3/E4 Facilities

The annual average concentration limitation for Total Nitrogen and/or Total Phosphorus is suspended during any calendar year in which the facility is considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level, provided that the following conditions have also been met:

- a. The facility has applied for (or renewed) participation, been accepted, maintained a record of sustained compliance and submitted an annual report according to the program guidelines;
- b. The facility has demonstrated that they have in place a fully implemented environmental management system (EMS) with an alternative compliance method that includes operation of installed nutrient removal technologies to achieve the annual average concentration limitations, and
- c. The E3/E4 designation from DEQ and implementation of the EMS has been in effect for the full calendar year.

The annual average concentration limitations for Total Nitrogen and/or Phosphorus, as applicable, are not suspended in any calendar year following a year in which the facility failed to achieve the annual average concentration limitations as required by b. above.

#### **D. Pretreatment Program**

The permittee's pretreatment program has been approved. The program is an enforceable part of this permit. The permittee shall:

1. Implement a pretreatment program that complies with the Clean Water Act, Water Control Law, State regulations and the approved program.
2. Submit to the DEQ Piedmont Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
  - a. An updated list of the Significant Industrial Users\* (SIUs) noting all of the following:
    - (1) facility address (mailing and physical), phone and contact name, title and email;
    - (2) explanation of SIUs deleted from the previous year's list;
    - (3) identify which Industrial Users (IUs) are subject to Categorical Standards and note which Standard (i.e. metal finishing);
    - (4) specify which 40 CFR part(s) is/are applicable;
    - (5) indicate which IUs are subject to local standards that are more stringent than Categorical Pretreatment Standards;
    - (6) indicate which IUs are subject only to local requirements;
    - (7) identify which IUs are subject to Categorical Pretreatment Standards that are subject to reduced reporting requirements under 9 VAC 25-31-840 E.3;
    - (8) identify which IUs are non-significant Categorical Industrial Users;
  - b. A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
  - c. A summary of the number and types of Significant Industrial User sampling and inspections performed by the Publically Owned Treatment Works (POTW).
  - d. All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.

- e. A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
  - f. A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Piedmont Regional Office.
  - g. A summary of the permits issued to Significant Industrial Users since the last annual report.
  - h. POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
  - i. Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
  - j. Copies of newspaper publications of all Significant Industrial Users in significant non-compliance that are published during the reporting period. This is due no later than March 31 of each year.
  - k. Signature of an authorized representative.
3. Submit any changes to the approved pretreatment program to the DEQ Piedmont Regional Office and obtain approval before implementation of the changes.
  4. Ensure all Significant Industrial Users' permits are issued and reissued in a timely manner and that the Significant Industrial User permits issued by the POTW are effective and enforceable.
  5. Inspect and sample all Significant Industrial Users at a minimum of once a year.
    - a. Sampling shall include all regulated parameters, and shall be representative of the wastewater discharged.
    - b. Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention and control procedures, hazardous waste generation and Significant Industrial User's self-monitoring and records.
  6. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.
  7. Review the Enforcement Response Plan (ERP) and ensure it meets state and federal regulatory requirements. The approved ERP is an enforceable part of this permit and shall be implemented.
  8. Develop local limits or reevaluate local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to the DEQ Piedmont Regional Office within one year following the effective or modification date. All Significant Industrial Users shall be sampled at the end of any categorical process and at the entrance to the treatment works.
  9. Ensure that adequate resources are available to implement the approved program.
  10. Meet all public participation requirements and annually public notice Significant Industrial Users in significant non-compliance with pretreatment standards and requirements for the previous 12 months.
  11. Within 180 days of the effective or modification date of this permit, submit to the DEQ Piedmont Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted to the POTW on the DEQ's Discharger Survey Form or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
  12. In lieu of the survey, the permittee may elect to develop, submit for approval and implement the plan to continuously survey the industrial community in their jurisdiction.
  13. The DEQ may require the POTW to institute changes to its pretreatment program:
    - a. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law or State regulations;
    - b. If problems such as pass-through, interference, water quality standards violations or sludge contamination develop or continue; or
    - c. If federal, state or local requirements change.

\*A significant industrial user is one that:

- a. Has an average flow of 25,000 gallons or more per day of process (\*\*) wastewater;
- b. Contributes a process waste stream which makes up 5.0-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
- c. Is subject to the categorical pretreatment standards; or
- d. Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

\*\*Excludes sanitary, non-contact cooling water and boiler blowdown

## E. Whole Effluent Toxicity (WET) Monitoring Program

### 1. Biological Monitoring

- a. In accordance with the schedule in Part I.E.2 below, the permittee shall perform annual chronic toxicity testing on Outfall 001 using 24-hour flow-proportioned composite samples for the duration of the permit. The chronic tests to use are:

Chronic 3-Brood Survival and Reproduction Static Renewal Test with *Ceriodaphnia dubia*

Chronic 7-Day Survival and Growth Static Renewal Test with *Pimephales promelas*

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. A retest of a non-acceptable test must be performed during the same compliance period as the test it is replacing. Express the test NOEC as TU<sub>c</sub> (Chronic Toxic Units), by dividing 100/NOEC for DMR reporting. Report the LC<sub>50</sub> at 48 hours and the IC<sub>25</sub> with the NOEC's in the test report.

- b. The test dilutions should be able to determine compliance with the following endpoint(s):

Outfall 001: Chronic NOEC  $\geq$  17%, equivalent to a TU<sub>c</sub>  $\leq$  5.88

- c. The permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- d. The test data will be evaluated by DEQ for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should DEQ evaluation of the data indicate that a limit is needed, the permit may be modified, or, alternatively, revoked and reissued to include a WET limitation and compliance schedule. Following written notification from DEQ of the need for including a WET limitation, the toxicity tests of Part I.E.1.a. may be discontinued.
- e. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

### 2. Reporting Schedule

The permittee shall submit the toxicity test reports to the DEQ Piedmont Regional Office for the tests specified in accordance with the following schedule:

<u>Period</u>	<u>Compliance Date</u>	<u>Submittal Date</u>
Annual 1	By 12/31/2017	By 01/10/2018
Annual 2	By 12/31/2018	By 01/10/2019
Annual 3	By 12/31/2019	By 01/10/2020
Annual 4	By 12/31/2020	By 01/10/2021
Annual 5	By 12/31/2021	By 01/10/2022

Part II. CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
  - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
  - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
  - c. Samples taken shall be analyzed by a laboratory certified under 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) and time(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Department of Environmental Quality  
Piedmont Regional Office  
4949-A Cox Road  
Glen Allen, Virginia 23060-6296

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical, or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

#### H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed.

The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

#### I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
  - a. Any unanticipated bypass; and
  - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
  - c. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

The Board may waive the written report on a case by case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

**NOTE: The immediate (within 24 hours) reports required in Parts II.G, H, and I may be made to the Department's Regional Office at (804) 527-5020 (voice), (804) 527-5106 (fax) or online (<http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx>). For reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and anytime Saturday through Sunday), leave a message and this shall fulfill the immediate reporting requirement.**

**For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.**



J. Notice of Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - (1) After promulgation of standards of performance under Section 306 of the Clean Water Act which are applicable to such source; or
    - (2) After proposal of standards of performance in accordance with Section 306 of the Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
  - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
  - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

1. Applications. All permit applications shall be signed as follows:
  - a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
  - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part II.K.1;



- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in

this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1 44.34:14 through 62.1 44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2 and U.3.

2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
  - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent

a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II.U.2.

- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required in Part II.I; and
  - d. The permittee complied with any remedial measures required under Part II.S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
  - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

## Part III. BIOSOLIDS

**A. Biosolids Limitations and Monitoring Requirements**

During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to manage Class B biosolids in accordance with: 9 VAC 25-31-420 through 720 and 9 VAC 25-32-303 through 358; the limitations, conditions and requirements set forth in this permit; and the approved Biosolids Management Plan.

All biosolids samples shall be collected and analyzed in accordance with Title 40 of the Code of Federal Regulations, Part 503 and 136, and the approved Biosolids Management Plan. Analyses shall be conducted by a VELAP accredited environmental laboratory. The permittee shall ensure that all biosolids generated under authority of this permit and provided to other persons, for the purpose of land application or further treatment, are monitored in accordance with the monitoring requirements as specified below in Part III.A.

1. Sewage Sludge Annual Production Monitoring (SP1)

The permittee shall report the annual total amount of sludge produced (in dry metric tons) and annual amount of Class B biosolids (in dry metric tons) distributed for land application. Data shall be reported on the Discharge Monitoring Report (DMR) for discharge number SP1.

2. Biosolids - Metals Limitations and Monitoring Requirements (S01)

Pollutants in Class B biosolids that are generated and provided to a land applier under the authority of this permit shall be monitored and limited as specified below. Biosolids shall not be provided for land application if the concentration of any pollutant in the biosolids exceeds the ceiling limitation of that pollutant.

PARAMETERS	PC / CPLR LIMITATIONS	CEILING LIMITATIONS	MONITORING REQUIREMENTS	
	MONTHLY AVERAGE (mg/kg) <sup>(1)(2)</sup>	CONCENTRATION MAXIMUM (mg/kg) <sup>(1)(2)</sup>	FREQUENCY	SAMPLE TYPE
Percent Solids (%)	NL	NA	Once per 60 days	Composite
Arsenic, Sludge	41	75	Once per 60 days	Composite
Cadmium, Sludge	39	85	Once per 60 days	Composite
Copper, Sludge	1,500	4,300	Once per 60 days	Composite
Lead, Sludge	300	840	Once per 60 days	Composite
Mercury, Sludge	17	57	Once per 60 days	Composite
Molybdenum, Sludge	NL <sup>(3)</sup>	75	Once per 60 days	Composite
Nickel, Sludge	420	420	Once per 60 days	Composite
Selenium, Sludge	100	100	Once per 60 days	Composite
Zinc, Sludge	2,800	7,500	Once per 60 days	Composite

"NL" means no limitation is established. Monitoring and reporting are required.

"NA" means not applicable.

(1) All parameters are subject to pollutant concentrations (PC), cumulative pollutant loading rates (CPLR), and ceiling limits. PC biosolids contain the constituents identified above at concentrations below the monthly average specified in Part III.A.2. CPLR biosolids contain the constituents identified above at concentrations above the monthly average and each sample must be below the maximum concentration specified in Part III.A.2.

(2) All limits and criteria are expressed on a dry weight basis.

(3) The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals.

### 3. Pathogen Reduction and Vector Attraction Reduction (VAR) Requirements

Class B – Biosolids generated and provided to a land applier under this permit shall be treated to meet no less than Class B Pathogen Reduction Alternative and VAR Option 1 prior to delivery to a land application site. The biosolids shall be monitored and limited in accordance with the treatment options selected as identified in the table below.

TREATMENT OPTION		CLASS B PATHOGEN REDUCTION & VAR TREATMENT & STANDARDS	MONITORING REQUIREMENTS
PATHOGEN REDUCTION ALTERNATIVE	PROCESS TO SIGNIFICANTLY REDUCE PATHOGENS (PSRP) OPTION		
2	3	PSRP: Anaerobic digestion for a mean cell residence time between 15 days at 35°C - 55°C up to 60 days at 20°C (9 VAC 25-31-710.D.3).	Once per 60 days

VAR OPTION	VECTOR ATTRACTION REDUCTION TREATMENT STANDARD	MONITORING REQUIREMENTS
1	38% Reduction of volatile solids by digestion (9 VAC 25-31-720.B.1.)	Once per 60 days (1) (2)
9	Sewage Sludge shall be injected below the surface of the land (9 VAC 25-31-720.B.9).	NA <sup>(3)</sup>
10	Sewage sludge land applied shall be incorporated into the soil within 6 hours after application (9 VAC 25-31-720.B.10).	NA <sup>(3)</sup>

"NA" means not applicable.

- (1) Between sampling events, operating records must demonstrate that the Wastewater Treatment Plant (WWTP) is operating at a performance level known to meet pathogen reduction and VAR standards.
- (2) Process monitoring must be sufficient to demonstrate compliance with PSRP and VAR treatment requirements.
- (3) If the selected VAR Option 1 is not met, the permittee shall provide notification to the land applier at the time the biosolids are delivered that the biosolids did not meet VAR at the WWTP and that the biosolids must be injected or incorporated. The Permittee shall obtain verification from the land applier that injection or incorporation occurred.

## B. **Biosolids Management and Reporting Requirements**

### 1. Approved Sources for Biosolids

Only biosolids from a source that has been approved by the DEQ, as identified on the DEQ's *Sources of Biosolids, Industrial Sludges, WTP Residuals* list, and treated to meet metals limits in Parts III.A.2 and pathogen reduction and VAR standards in Part III.A.3 shall be given to any person for the purpose of land application.

### 2. Biosolids Monitoring Frequency and Reporting Requirements

#### a. Monitoring Frequency.

The monitoring frequency is once per 60 days. The monitoring frequency may be increased during this permit term if DEQ deems it necessary. Further, 9 VAC 25-31-570.A allows monitoring frequency to be reduced after 2 years of monitoring.

#### b. Annual Report

The permittee shall submit an Annual Report not later than February 19th of each year to the DEQ Piedmont Regional Office. Each report is for the previous calendar year's activity. If no biosolids were generated and provided to a land applier under this permit during the reporting year, a report shall be submitted stating that no biosolids were generated or delivered during the

year. The report shall include at minimum:

- 1) Part III.A.1. Sewage Sludge Annual Production Monitoring;
- 2) Biosolids Monitoring Data:
  - a) Part III.A.2 Biosolids – Metals Limitations;
  - b) Part III.A.3 Biosolids – Pathogen Reduction and Vector Attraction Reduction (VAR) Requirements;
  - c) Supporting documentation, including laboratory chain of custody forms and certificates of analyses, shall be submitted with the report;
  - d) Monthly average shall be reported as the average of the results of all samples collected within a calendar month and analyzed using an approved method, in accordance with Part II.A.1.-2 of this permit. For monitoring periods which include multiple months, if one sample is collected during the monitoring period, that result shall be reported as the monthly average. If samples are collected in multiple months during the monitoring period, a monthly average shall be calculated for each month in which samples were collected during the monitoring period and the highest monthly average reported. Individual results and calculations shall be submitted with the report; and
  - e) The maximum concentration shall be reported as the highest single result from all samples collected and analyzed during a monitoring period.
- 3) A summary of biosolids disposal contracts, if any, currently held with other generators, as well as any other biosolids or sludges currently being handled through subcontracts or other agreements. Include biosolids or sludges given to other generators, contractors or land filled, and biosolids or sludges accepted from other generators for treatment or land application.
- 4) Identify other methods used to dispose of or use biosolids or sludge produced during the previous calendar year. Report the annual total amount of biosolids or sludge (in dry metric tons) disposed of or used by each method identified; and
- 5) The annual report shall be certified and signed in accordance with Part II.K.

### 3. Record Keeping

The permittee is required to retain the following information for at least five years:

- a. The concentrations of each pollutant in Parts III.A.2.
- b. A description of how the pathogen reduction requirements in Parts III.A.3 are met;
- c. A description of how the vector attraction reduction requirements in Part III.A.3 are met;
- d. A description of how the management practices specified in the approved Biosolids Management Plan and this permit are met;
- e. The reports required in Part III.B.2
- f. The NANI's required in Part III.B.4; and
- g. The following certification statement(s) as applicable:

*"I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in 9VAC25-31-710 A, the Class B pathogen requirements in (insert, B 2, B 3, or B 4 when one of those requirements is met) and the vector attraction reduction requirements in (insert one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 8 when one of those requirements is met) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."*



#### 4. Notice and Necessary Information (NANI)

A NANI shall be provided to any person to whom biosolids are provided for the purpose of further treatment or land application. The NANI shall be provided at the time the biosolids are provided if available, but no later than 45 days after the last day of the month in which biosolids were provided. The NANI shall represent the most recent monitoring period.

The NANI shall be on the form provided with this permit and include at minimum:

- a. A statement that Class B pathogen requirements in 9 VAC 25-31-710.B were met and the alternative used;
- b. A statement that one of the VAR requirements in 9 VAC 25-31-720.B.1 through B.8 was met and the alternative used; or
- c. A statement that one of the VAR requirements in 9 VAC 25-31-720.B.1 through B.8 was not met and incorporation or injection was required;
- d. The notice(s) provided to the land applier when biosolids provided did not meet VAR and required incorporation or injection;
- e. The concentration of total nitrogen (as N on a dry weight basis) of the biosolids
- f. The following certification statement:

*"I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in 9VAC25-31-710.B and the VAR requirement in (insert one of the VAR requirements in 9VAC25-31-720.B.1 through B.8, if one of those requirements is met) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification, including the possibility of fine and imprisonment".*

#### 5. Biosolids Management Plan (BSMP)

- a. The permittee shall conduct all biosolids/sewage sludge use or disposal activities in accordance with the Biosolids Management Plan approved with the issuance of this permit. The permittee shall maintain the BSMP which consists of the following components:
  - (1) The materials developed and submitted at the time of permit application or permit modification in accordance with 9 VAC 25-31-100.Q;
  - (2) The Operations and Maintenance (O&M) Manual (Sections regarding solids handling and biosolids production and management, etc); and
  - (3) The Odor Control Plan.
- b. Odor Control Plan (OCP) Requirement

If an OCP is not on file at DEQ, an OCP shall be submitted to DEQ within 90 days of the modification/effective date of this permit. The OCP shall include at a minimum:

  - (1) Methods used to minimize odor in producing biosolids;
  - (2) Methods used to identify malodorous biosolids before delivery to the land applier (at the generating facility);
  - (3) Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land application; and
  - (4) Methods used to abate malodor from biosolids if land applied.
- c. The BSMP and all of its components are an enforceable part of the permit.

- d. Any proposed changes in the biosolids/sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ Piedmont Regional Office approval 90 days prior to the effective date of the changes. Upon approval, the revised Biosolids Management Plan becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in biosolids/sewage sludge use or disposal practices.

6. Biosolids/Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for biosolids/sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for biosolids/sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.